RECEIVED #10

MAY

1652 TECH CENTER 1600/2900

ENTERED   1600

```
 3 <110> APPLICANT: Solari, Augusto Inventi
 4         Zanuso, Giovanna
 5         Filippini, Silvia
 6         Torti, Francesca
 7         Otten, Sharee
 8         Colombo, Anna Luisa
 9         Hutchinson, Charles R
11 <120> TITLE OF INVENTION: PROCESS FOR PREPARING DOXORUBICIN
13 <130> FILE REFERENCE: 101615-00009
15 <140> CURRENT APPLICATION NUMBER: US 09/673,254
16 <141> CURRENT FILING DATE: 2000-12-06
18 <150> PRIOR APPLICATION NUMBER: PCT/US99/07016
19 <151> PRIOR FILING DATE: 1999-04-22
21 <150> PRIOR APPLICATION NUMBER: US 09/065,606
22 <151> PRIOR FILING DATE: 1998-04-24
24 <160> NUMBER OF SEQ ID NOS: 1
26 <170> SOFTWARE: PatentIn version 3.1
28 <210> SEQ ID NO: 1
29 <211> LENGTH: 2870
30 <212> TYPE: DNA
31 <213> ORGANISM: Streptomyces peucetius
33 <400> SEQUENCE: 1
34 ggatccgcac cgggtacacg gcacgggacc gcccaccgcg cggtgcgcgg tgggcggtcc      60
36 cgtgccggtc gcggccggcg gatcagcgca gccagacggg cagttcggtg agccgcgccg     120
38 tctgggcccc cttccggcac caccgcaact cgtcgtacgg cacggccagt cgggcctcgg     180
40 ggaacctgct gcgcagtacg ccgatcatcg tgcgcgactc cagctgggcg agctgctccc     240
42 cgatgcagta gtgcggcccg tcgccgaagg tgagccgccg ccacgaggga cggtccgggt     300
44 ggaaggcgtg cggggcgtcg tgatggcggc cgtcggtgtt ggtgccctcg atgtccacca     360
46 gcaccggcgc tccgcggggc agccggacgc cgccgatggt cacctccgtg gcagcgaacc     420
48 tccacaacgt gtagggcacc ggcgggtggt agcgcagcgc ctcctccacg aaccgggaga     480
50 cggcgtcctc gtcggcatcc gccgcgaggc ggcccgccag gacctccgcg agcaggaagc     540
52 ccaggaagga gccggtggtg tcgtggccgg cgaagatgag cccggtgatc atgtagacga     600
54 gctggtcgtc ggagaccgag ccgaactcgg cctgcgcgcg ctcgtacagc acgcgggtca     660
56 tggtcggggt gtcgttccgc cgggctgagt gcacggcttc gaggagcagg ctctccaggg     720
58 ccgaggtgtc cggcacgccc ccggcagggt ccgtgccgtc accccgccg ctctgcgggc     780
60 cgccgaggcc gagtgccttg agaacgctga cggcctcgcg ggccatcgcc ggatcggtga     840
62 ccggcacacc gagcagctcg cagatgacca acagcgggaa gtggtacgcg aagccgccga     900
64 tcagctcggc cggtttgccc gaccggccgg aggcgtcggc gagttcggtg agcagccggc     960
66 cggcgatcgc ggcgatgcga tccgtccgct cggccagccg gcgcgggttg aacgcaggtg    1020
68 cgtggatgcg gcgcaggcgc cggtgggcct cgccgtccac ggcgatgagc gtgaacggac    1080
70 gcagctccgg aacggggatg tcgagaccgt cgtccacccc cgccaggcg gcgggggcga    1140
72 ggtcggggtc cttcacgaac cggggatcgg ccagcacctc gcgggcgagg gcgtcatcgg    1200
74 tgatgaccca ggcgggtccg cccgcggggg cgttcacctc gacgaccggg cccgcctccc    1260
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/673,254

DATE: 04/30/2002
TIME: 15:34:21

Input Set : A:\101615.00009.txt
Output Set: N:\CRF3\04302002\I673254.raw

```
 76 ggaaggcgtc gtgcacctcg ggcttgcgct gcatggtcat catgggacac gcgaacgggt  1320
 78 cgacggccac ccggggcgcc tcgccgctca cgaggcaccg cccgccgccg cggggtaccc  1380
 80 ctcccgcagt tcgaccaccg agaagccggc cccgtgcggg tcgagcaggt ccgcccgccg  1440
 82 ccccctgggc gtgtcggcgg gctcgttctc gacggagccg ccgagttcaa cggcgcgccg  1500
 84 gaccgtcgcg tcgcagtcgt gcacggcgaa cagcacggcc cagtgcggcc gtaccgcgcc  1560
 86 ggtgacgccc agctcctggg tgccggcgac cggtgtgtca ccgatgtgcc agaccgggtc  1620
 88 ggtgacgccc ttcagtccgg tgtcggccgg agccaggccg agggtcgccg ggtagaagtc  1680
 90 ccgggcggcc ccgatgccgt cggtcaccag ctcgacccag ccgaccgagc cgggcacgcc  1740
 92 cgtcacctcc gcgccctcca tgactccctt gcgccagacc gcgaacgcgg ccccggcggg  1800
 94 gtcggcgaag accgccatcc ggccgaggcc gaggacgtcc atcggagtca tgatgacctc  1860
 96 gccgcccgcc gtctcgaccc gcttggtcag tgcgtcggcg tcgtcggtgg cgaagtacac  1920
 98 ggtccagatg gccggcatgc cgtgctggtc gttcccgggc ccgtacggcc ggtggtaggg  1980
100 ggtgtcgatc tggtggcggg cgaccgcggc gaccagcttc ccgtcggagc tgaacgtcgt  2040
102 gtatcccccg gcgcccgggt cgctgaccac ggtggcggtc cagccgaaca ggccggtgta  2100
104 gaagtcggcc gaggcggcga catcgggcga accgaggtcg aaccatgcgg gggcgccggg  2160
106 cgcgaacctg gtcacgaatc gttcctttcg atggatcggc acacgagcgt ctgcgctcgc  2220
108 ggatgagacg gacatctcgc ggatgagacg gacatgcggg cggggcgggc cgccgccgtc  2280
110 agtgcgcggt gtcgccgacg gcggccgcgc cggcctccca gagcttcgcc gcgaggccgg  2340
112 cgtcggcggt cgggccgctc accggggaca gccgccggtc gctgtagtag ccgcccgtgg  2400
114 tcaactcctc ggccggcgcg gacgccagcc acacgagggt gtcggcgccc ttcgccgcgg  2460
116 agcgcaggaa ggggttgaac cggaagtagg acgaggcgac cgtgccccgt ccgatgcggg  2520
118 tgcggacctc accggggtga tagctgaccg ccagcacgtc cggccagcgc ctggcggcct  2580
120 ccgccgcggt catgatgttg gcctgtttgg acgtgccgta cgcctggccg gcgctgtagc  2640
122 ggtgacggtc gccgttgagg tcgtccgggt cgatccggcc ctgggtgtac gcgtcggacg  2700
124 aggtgaggat cagccgcccg cccgcgagcc gctcccgcag cagccgtgcc agcaggaagc  2760
126 ctgcgaggtg attgacctgg atggtggcct cgaacccgtc ctgggtcgtg gtgcgcgacc  2820
128 agaacatgcc gccggcgttg ctggccatga catcgatgcg cgggtaccgg            2870
```

VERIFICATION SUMMARY DATE: 04/30/2002
PATENT APPLICATION: **US/09/673,254**   TIME: 15:34:22

Input Set : **A:\101615.00009.txt**
Output Set: **N:\CRF3\04302002\I673254.raw**